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EXAMINER

SHEDRICK, CHARLES TERRELL

ART UNIT

PAPER NUMBER

2617

NOTIFICATION DATE

DELIVERY MODE

12/17/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11/25/09 have been fully considered but they are not persuasive.
2. Applicant argues that the technique disclosed in Gruhl is fundamentally linked to Downlink Packet Scheduling. On the other hand, the claims 16-18 relates to Uplink Packet Scheduling. Thus, Gruhl is fundamentally different from the claimed invention. In order for the base station to control the transmission of each of the mobile stations, the base station receives "a provisional scheduling information" which the mobile station transmits to the base station and which is described in claim 16 of this application. Specifically, claim 16 recites that "the mobile station transmits to the base station a provisional scheduling information" which is given by dividing the data flows into groups on the basis of the priority levels of each of the data flows and by producing the provisional scheduling information based on a buffer accumulation amount of the data flows of each group. The "base station [then] determines an assigned capacity for the data flow on the basis of the provisional scheduling information." Gruhl does not disclose that the mobile station transmits to the base station a provisional scheduling information. Instead, Gruhl discloses that a Connection Admission Controller (CAC) module receives traffic characteristics along with the QoS requirements of all existing connections from the serving base station (paragraph 74). The invention according to claim 16 of this application achieves Uplink Packet Scheduling when the mobile station has a plurality of data flows and is capable of transmitting a plurality of data flows to a base station. The invention according to claim 16 of this application also achieves, in the Uplink Packet Scheduling, transmission control of each of

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the data flows and optimization of the control signal necessary for transmission control of each of the data flows. The optimization of the control signal necessary for transmission control of each of the data flows is a problem specific to Uplink Packet Scheduling and is not necessary in Downlink Packet Scheduling. Thus, a person of ordinary skill in the art would readily understand that Gruhl, which is linked to Downlink Packet Scheduling, does not disclose the features of claim 16 which specifically address the optimization of the control signal necessary for transmission control of each of the data flows specific to Uplink Packet Scheduling. That is, because Gruhl is related to Downlink Packet Scheduling and not to Uplink Packet Scheduling, Gruhl does not and would not have a reason to address the problems associated with Downlink Packet Scheduling, which are addressed by the features recited in claim 16. Thus, for this additional reason, it should be clear that Gruhl does not disclose each and every feature of claim 16. Instead, Gruhl discloses a Call Admission Control (Claim 1 and Fig. 8) in a mobile telecommunications network for managing the downlink capacity. In view of the above, Gruhl fails to disclose each and every feature of claim 16, and thus, claim 16 is patentable for at least this reason.

3. However, The Examiner respectfully disagrees. Carefully consider the rejection within the context of the following: Gruhl teaches in paragraph 0066 “*that the decision is made by a QoS management structure, the components of which are shown in FIG. 5. The components are viewed as logical entities, that is, the location is not indicated. The structure may be located in the MT 12, in a BS 14, or in both”*. In paragraph 0106 Gruhl follows with “*Different scheduling schemes may apply, depending on the traffic direction*” (i.e., it appears that Gruhl clearly

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recognizes scheduling and traffic management in the uplink and downlink direction). Therefore, the rejection is maintained as proper.

4. Additionally, claims 17 and 18 are not patentable at least by virtue of their dependency on claim 16.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES SHEDRICK whose telephone number is (571)272-8621. The examiner can normally be reached on Monday thru Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles Shedrick/
Examiner, Art Unit 2617